

Title (en)

Sheet feeding apparatus, image forming apparatus having the same and image reading apparatus having the same

Title (de)

Blattzuführvorrichtung, Bilderzeugungsgerät mit einer solchen Vorrichtung und Bildlesegerät mit einer solchen Vorrichtung

Title (fr)

Dispositif d'alimentation en feuilles, appareil de formation d'images avec un tel dispositif et appareil pour lire des images avec un tel dispositif

Publication

**EP 0994052 A3 20010103 (EN)**

Application

**EP 99120403 A 19991013**

Priority

- JP 29196098 A 19981014
- JP 13239799 A 19990513

Abstract (en)

[origin: EP0994052A2] A sheet feeding apparatus including a movable sheet supporting device for supporting a sheet, a sheet feeding device urged against the sheet supported by the sheet supporting device and adapted to rotate in a sheet feeding direction to feed the sheet, a feeding device disposed at a downstream side of the sheet feeding device in the sheet feeding direction and adapted to feed the sheet fed from the sheet feeding device, a separating roller adapted to rotate in a sheet restoring direction to restore the sheet fed from the sheet feeding device, a drive transmitting device for stopping rotation of the sheet feeding device toward the sheet feeding direction before a leading end of the sheet fed out from the sheet supporting device by the sheet feeding device reaches the feeding device and then for rotating the sheet feeding device in the sheet feeding direction again, and a pressing and retracting device for moving the sheet supporting device which abutted the sheet against the sheet feeding device before the leading end of the sheet fed out from the sheet supporting device by the sheet feeding device reaches the feeding device, thereby effecting the abutment-releasing between the sheet feeding device and the sheet. <IMAGE>

IPC 1-7

**B65H 3/06**; **B65H 3/52**; **B65H 5/06**

IPC 8 full level

**G03G 15/00** (2006.01); **B65H 1/14** (2006.01); **B65H 3/06** (2006.01); **B65H 3/52** (2006.01)

CPC (source: EP KR US)

**B65H 1/14** (2013.01 - EP US); **B65H 3/0669** (2013.01 - EP US); **B65H 3/5261** (2013.01 - EP US); **G03G 15/00** (2013.01 - KR); **B65H 2301/42324** (2013.01 - EP US); **B65H 2402/31** (2013.01 - EP US); **B65H 2403/421** (2013.01 - EP US); **B65H 2403/512** (2013.01 - EP US); **B65H 2405/11162** (2013.01 - EP US)

Citation (search report)

- [A] EP 0754637 A2 19970122 - MITSUBISHI ELECTRIC CORP [JP]
- [A] DE 3334522 A1 19840329 - RICOH KK [JP]
- [A] US 5312098 A 19940517 - INOUE TATSUYA [JP]
- [A] US 4526358 A 19850702 - URA HIROAKI [JP], et al
- [A] EP 0567112 A1 19931027 - CANON KK [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 011, no. 385 (M - 651) 16 December 1987 (1987-12-16)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01 30 January 1998 (1998-01-30) & US 5984297 A 19991116 - TANAKA YOSHIKI [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 013, no. 163 (M - 816) 19 April 1989 (1989-04-19)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 04 31 May 1995 (1995-05-31)

Cited by

EP1630113A3; EP1405806A3; US7597316B2; US6947693B2

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